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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,374	01/28/2004	Shau-Lin F. Chen	4424/4526	2891
7590	09/29/2004		EXAMINER	
Richard R. Muccino 758 Springfield Avenue Summit, NJ 07901			LANGE, WAYNE A	
			ART UNIT	PAPER NUMBER
			1754	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT

PAPER NUMBER

**DATE MAILED:**

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

This application has been examined  Responsive to communication filed on \_\_\_\_\_  This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 0 days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

1.  Notice of References Cited by Examiner, PTO-892.
2.  Notice of Draftsman's Patent Drawing Review, PTO-948.
3.  Notice of Art Cited by Applicant, PTO-1449.
4.  Notice of Informal Patent Application, PTO-152.
5.  Information on How to Effect Drawing Changes, PTO-1474.
6.  \_\_\_\_\_

**Part II SUMMARY OF ACTION**

1.  Claims 74, 75, 78-82 and 93-105 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2.  Claims \_\_\_\_\_ have been cancelled.
3.  Claims \_\_\_\_\_ are allowed.
4.  Claims 74, 75, 78-82 and 93-105 are rejected.
5.  Claims \_\_\_\_\_ are objected to.
6.  Claims \_\_\_\_\_ are subject to restriction or election requirement.
7.  This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8.  Formal drawings are required in response to this Office action.
9.  The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are  acceptable;  not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10.  The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been  approved by the examiner;  disapproved by the examiner (see explanation).
11.  The proposed drawing correction, filed \_\_\_\_\_, has been  approved;  disapproved (see explanation).
12.  Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has  been received  not been received  been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13.  Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14.  Other \_\_\_\_\_

**EXAMINER'S ACTION**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 74, 75, 78-81, 95-97 and 102 are rejected under 35 U.S.C. § 102(b) as being anticipated by Feeley et al. Feeley et al. disclose a method for removing nitrogen oxides and sulfur oxides from a gaseous stream (column 2, lines 42-53) in the presence of a sorbent material including a composite comprising a first layer comprising a first support and a first platinum component (the paragraph bridging columns 2 and 3), and a second layer comprising an alkali metal or alkaline earth metal oxide, or a transition metal oxide such as manganese oxide or rare earth metal oxides (column 11, lines 13-34). Feeley et al. teach at column 8, lines 38-42 that the sorbent material is regenerated by thermal treatment. Regarding claim 75, Feeley et al. teach at column 6, lines 47-51 that the carrier member may be aluminum oxide.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this

## Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 82, 93, 94, 98-101 and 103-105 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Feeley et al. Feeley et al. is relied upon as discussed hereinbefore. Regarding claim 82, it would be obvious to employ magnesium oxide or lithium oxide as the sorbent material for the catalyst of Feeley et al., since Feeley et al. suggest at column 11, lines 26-31 that any alkali metal or alkaline earth metal oxide may be used. Regarding claims 93 and 94, it would be within the skill of one of ordinary skill in the art to determine a suitable or optimum concentration for the second layer in the catalyst of Feeley et al. Regarding claims 98-100, it would be obvious to employ lithium oxide or a rare earth oxide as the nitrogen oxides sorbent component in the catalyst of Feeley et al., since Feeley et al. suggest at column 11, lines 27-32 that any rare earth metal oxide or alkali metal oxide may be employed. Regarding claims 103-105, it would be obvious to employ a third layer for the catalyst of Feeley et al., with the expected result of a more

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efficient removal of sulfur oxides and nitrogen oxides in the process.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne A. Langel whose telephone number is (571) 272-1353. The examiner can normally be reached on Monday through Friday from 8 A.M. to 3:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on (571) 272-1358. The fax phone number for this Group is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or public PAIR. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Serial No. 10/766,374

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September 27, 2004

*Wayne A. Langel*  
WAYNE A. LANGEL  
PRIMARY EXAMINER